REMARKS

Claims 1-37 were pending in the present application. Claims 1-37 were rejected. Claims 6-9, 13-17, 24-28, 34, and 36 have been canceled; and claims 1, 3, 5, 10-12, 18-20, 22, 29-33, 35 and 37 have been amended. Reconsideration of the claims is respectfully requested.

Independent claim 1 has been amended to clarify the subject matter which applicant regards as the invention. Particularly, claim 1 has been amended to clarify that the receiving, performing, adding, and sending steps are performed by a first security server among a plurality of security servers. Additionally, claim 1 has been amended to recite the limitation that the modified request is presented to a plurality of components of the web application server wherein each of the plurality of components correspond with one of a plurality of security servers and that validation of the modified request is performed by the component that corresponds with the security server that received the original request from the user. (See Page 14, Line 27-Page 15, Line 1; Page 15, Lines 23-27, Page 17, Lines 7-10; Page 20, Lines 8-20). No new matter has been introduced by the amendment to claim 1. Additionally, independent claims 18, 19, 24, 29, and 37 have been amended to clarify the subject matter which Applicant regards as the invention. Claims 18, 19, 24, 29, and 37 have been amended to include features similar to that of claim 1. No new matter has been introduced by the amendments to claims 18, 19, 24 29, and 37.

I. Claim Objections

Claim 18 was objected to because of an informality. Claim 18 has been amended to recite "present" rather than "represent" as suggested by the examiner. Withdrawal of the objection to claim 18 is thus requested.

Claim 19 was objected to because of an informality. Claim 19 has been amended to recite "adds" rather than "add" as suggested by the examiner. Withdrawal of the objection to claim 19 is thus requested.

Claim 29 was objected to because of an informality. Claim 29 has been amended to recite "present" rather than "represent" as suggested by the examiner. Withdrawal of the objection to claim 29 is thus requested.

Claim 37 was objected to because of an informality. Claim 37 has been amended to recite "present" rather than "represent" as suggested by the examiner. Withdrawal of the objection to claim 37 is thus requested.

II. 35 U.S.C. § 112, Claim Rejections

Claim 5 has been rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The limitation of "the data processing system" has been amended to recite "the first security server" to clarify the element that is identified by the information. Withdrawal of the rejection of claim 5 under 35 U.S.C. § 112 is respectfully requested.

Claims 6-12 have been rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 6-9 have been cancelled. Claims 10-12 have been amended to distinctly claim the subject matter which applicant regards as the invention. Particularly, claim 10 has been amended to depend from claim 4 and recite the limitation that the user identification is a user name and password (See Page 20, lines 13-15). Claim 11 has been amended to depend from claim 1 and recite the limitation that the validating step comprises determining that a value of the information added to the request is an expected value located in a data structure (Page 20, Lines 15-20). Claim 12 has been amended to depend from claim 1 and to recite the limitation that each of the plurality of components respectively comprises an interceptor (Page 17, Lines 7-10). No new matter has been added by the amendments to claims 10-12. The amendments to claims 10-12 point out and distinctly claims the subject matter which applicant regards as the invention. Accordingly, withdrawal of the rejection of claims 10-12 under 35 U.S.C. 112, second paragraph, is respectfully requested.

Claim 18 has been rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 18 has been amended to recite the limitation that the request is received by the claimed data processing system from a security server. For example, the data processing system may be implemented as a web

application server that receives a modified request from a security server implemented as a reverse proxy security server (See Page 14, Line 27- Page 15, Line 1.) Additionally, claim 18 has been amended to include the limitation that the data processing system that receives the modified request submits the modified request to a plurality of components that each corresponds to a respective security server (See Page 15, Lines 23-27; and Page 17, Lines 7-10). Additionally, claim 18 has been amended to clarify that the steps of determining and processing are performed by the processing unit. No new matter has been added by the amendment to claim 18. The amendment to claim 18 points out and distinctly claims the subject matter which applicant regards as the invention. Accordingly, withdrawal of the rejection of claim 18 under 35 U.S.C. 112, second paragraph, is respectfully requested.

Claims 29-35 have been rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 29 has been amended to recite the limitation that the request is received from a security server that is one of a plurality of security servers. For example, the data processing system to which claim 29 is directed may be implemented as a web application server that receives modified requests from a plurality of security servers (See Page 14, Line 26-Page 15, Line 1; Page 15, Line 21-27; Page 17, Lines 7-10; and Page 20, Lines 8-20). No new matter has been introduced by the amendment to claim 29. Claim 30 has been amended to better clarify the subject matter which applicant regards as the invention and to properly depend from amended claim 29. Claim 31 has been amended to clarify that the reverse proxy server is the first security server recited in amended claim 29. Claim 32 has been amended to clarify that the information is an identification of the first security server (See Page 19, Lines 1-7). Claim 33 has been amended clarify that the information is a user name and password of a user of the client (See Page 19, Lines 1-7). Claim 34 has been cancelled. Claim 35 has been amended to properly depend from amended claim 29 and to clarify and distinctly claim the subject matter with applicant regards as the invention. No new matter has been introduced by the amendments to claims 29-33 and 35. Accordingly, withdrawal of the rejection of claims 29-33 and 35 under 35 U.S.C. 112, second paragraph, is respectfully requested.

III. 35 U.S.C. § 102, Anticipation

The Office Action has rejected claims 1-14, 17-19 and 21-37 under 35 U.S.C. § 102(e) as being anticipated by Abdelnur et al. (US 6,212,640 B1) (hereinafter Abdelnur). This rejection is respectfully traversed.

With regard to claim 1, the Office Action states the following:

> As for claim 1, Abdelnur discloses a method in a data processing system for authenticating a request, the method comprising:
> receiving a request from a client (step 510, Fig. 5; col. 10, lines 56-59, "At step 510...by client 430.");
> performing authentication of the request (step 610, Fig. 6; col. 11, lines 47-52, "At step 610...application, for example");
> adding information to the request to form a modified request, wherein the information indicates that the request is from a trusted source (col. 12, lines 7-19, "In one or more...submitting false credentials."); and
> sending the modified request to a server (step 620, Fig. 6; col. 11, lines 57-63, "However, if the authorization...access its resources.").

Office Action dated 4/19/2004, pages 6-7.

With respect to this rejection, a prior art reference anticipates the claimed invention under 35 U.S.C. § 102 only if every element of a claimed invention is identically shown in that single reference, arranged as they are in the claims. *In re Bond*, 910 F.2d 831, 832, 15 U.S.P.Q.2d 1566, 1567 (Fed. Cir. 1990). All limitations of the claimed invention must be considered when determining patentability. In re Lowry, 32 F.3d 1579, 1582, 32 U.S.P.Q.2d 1031, 1034 (Fed. Cir. 1994). Anticipation focuses on whether a claim reads on the product or process a prior art reference discloses, not on what the reference broadly teaches. Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 218, U.S.P.Q. 781 (Fed. Cir. 1983). In this particular case, each and every feature of the presently claimed invention is not identically shown in *Abdelnur*, arranged as they are in the claims.

For example, amended claim 1 recites the following:
> 1.   A method in a data processing system for authenticating a request, the method comprising:
> receiving, by a first security server of a plurality of security servers, a request from a client;
> performing authentication of the request by the first security server;

adding, by the first security server, information to the request to form a modified request, wherein the information indicates that the request is from a trusted source;

sending, by the first security server, the modified request to a web application server;

presenting the modified request to each of a plurality of components of the web application server, wherein each of the plurality of components correspond with a respective one of the plurality of security servers; and

validating, by a one of the plurality of components that corresponds with the first security server, the modified request.

As described in the present application and as claimed by amended independent claim 1, a plurality of trust association interceptors implemented as components within a web application server are presented with the modified request. Each component corresponds with a different security server type. (See Page 15, Lines 23-27; Page 17, Lines 7-10 and Lines 23-24; and Page 18, Lines 4-7; and Page 19, Lines 27-28). One of the plurality of components validates the modified request (Page 15, Line 27-Page 16, Line 1), for example by requiring a user name representing the proxy server to be included in the modified request. Thus, a one of the plurality of components validates trust with the security server that received and modified the request from the client. For example, Figure 3 shows the following:

FIG. 3
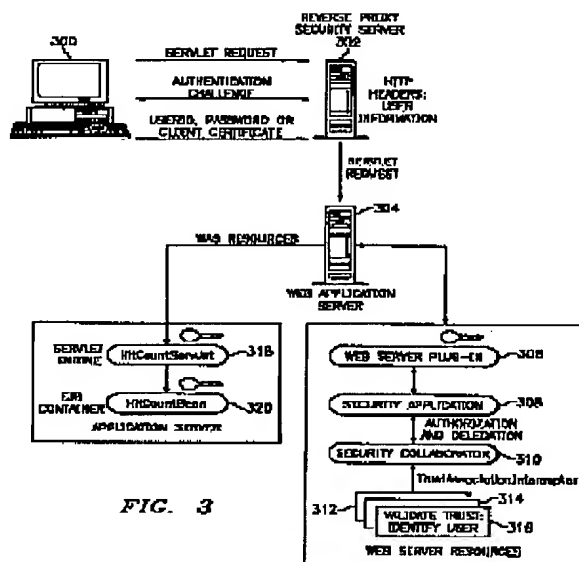
As can be seen, a web server application includes a plurality of components (trust association interceptors 312, 314, and 316) that, together with a security collaborator of

the web application server, receive a request from the web application server that has been modified by a security server (reverse proxy security server 302). Each component (interceptor) corresponds to one of a plurality of security servers and facilitates trust validation with the corresponding security server. The set of components thereby facilitates trust validation among a set of security servers for supporting different security restrictions to a resource.

Abdelnur neither teaches or suggests a method that facilitates a backend server, e.g., a web application server, to support multiple reverse proxy security servers that may feature different security restrictions. Particularly, Abdelnur neither teaches or suggests a system or method having a "plurality of components" that each "correspond with a respective one of" a "plurality of security servers." Thus, Abdelnur fails to teach or suggest a system or method for validating "by a one of the plurality of components that corresponds with the" security server that received a request from a client.

Abdelnur explicitly describes a system for allowing applications "retrieved from *one* network server" (*emphasis added*) to access "resources available on other servers on the network" (Column 9, Lines 50-53). That is, Abdelnur provides a mechanism that facilitates access to multiple servers with which the client is unable to directly authenticate. For example, Abdelnur states the following:

> Embodiments of the invention provide an environment in which an application can indirectly access services or *resources available on servers* that it cannot directly authenticate against. Column 10, Lines 24-27
> In addition to resources available on web server 480, application 410 may also need to access resources available on other servers on network 450, such as server 460. Column 10, Lines 41-43.

Thus, Abdelnur provides a mechanism that facilitates client access of multiple servers via a single web server, while the subject application facilitates access of clients to a resource via multiple security servers such that multiple security restrictions may be deployed.

Amended independent claims 18, 19, 29, and 37 recite similar features as claim 1. Therefore, the same distinctions between Abdelnur and the claimed invention in claim 1 apply for these claims. For the reasons described above, Abdelnur does not contain all elements of independent claims 1, 18, 19, 29, and 37. Hence, Abdelnur fails to anticipate the present invention as recited in claims 1, 18, 19, 29, and 37. Since claims 2-5 and 10-

12 depend from claim 1, claims 21-23 depend from claim 19, and claims 30-33 depend from claim 29, the same distinctions between Abdelnur and the claimed invention in independent claims 1, 18, 19, 29, and 37 apply for these claims. Additionally, claims 2-5, 10-12, 21-23, and 30-33 claim other additional combinations of features not suggested by the reference. Consequently, it is respectfully urged that the rejection of claims , 1-5, 10-12, 18-19, 21-23, 29-33, and 37 under 35 U.S.C. § 102(e) as being anticipated by Abdelnur has been overcome, and such a notice is respectfully requested.

IV.   35 U.S.C. § 103, Obviousness

The Office Action has rejected claim 20 under 35 U.S.C. § 103(a) as being unpatentable over Abdelnur. This rejection is respectfully traversed.

With respect to claim 20, the Office Action states the following:

> Abdelnur does not explicitly disclose a third sever for performing essentially the same functions as the first server. However, Abdelnur clearly discloses the invention in the context of a network environment such as the internet coupled with a LAN/WAN, the network comprising multiple servers, client, back-end resources, etc. (see col. 1, lines 26-55, "In computer networks...via the Internet."; col. 8, lines 28-62, "A method and apparatus...the requesting application."). Therefore, Abdelnur clearly anticipates the use of additional servers, including a third server, as recited in claim 20. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Abdelnur by adding a third server, wherein the third server receives requests from clients to access a resource, performs an authentication process with the clients, add information to the requests in which the information indicates that the requests are from a trusted source to form modified requests, and sends the modified requests to the second server for processing, because this would provide additional network resources for processing requests.

Office Action dated 4/19/2004, Page16-17.

Applicant respectfully disagrees. As noted above, Abdelnur describes only a technique that facilitates access to multiple servers with which a client is unable to directly authenticate. Abdelnur is wholly silent with regard to a mechanism for validating trust with a resource and multiple security servers such that different security restrictions are placed on the resource dependent on the security server through which client access requests are passed. Moreover, if an independent claim is non-obvious under 35 U.S.C. 103, then any claim depending therefrom is non-obvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). Thus, claim 20 is non-obvious as Applicants

have already demonstrated claim 19 to be in condition for allowance. Applicants respectfully submit that claim 20 is also allowable, at least by virtue of the dependence of claim 20 on an allowable base claim, and such a notice is respectfully requested.

V. Conclusion

It is respectfully urged that the subject application is patentable over Abdelnur and is now in condition for allowance.

The examiner is invited to call the undersigned at the below-listed telephone number if in the opinion of the examiner such a telephone conference would expedite or aid the prosecution and examination of this application.

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Respectfully submitted,

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